

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
29 April 2004 (29.04.2004)

PCT

(10) International Publication Number  
WO 2004/035289 A1

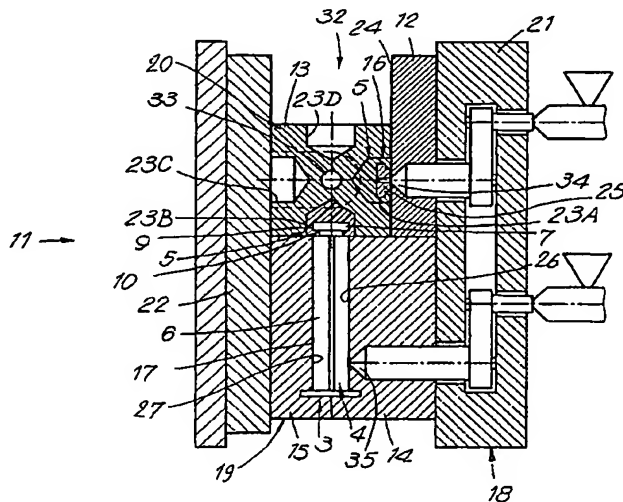
- (51) International Patent Classification<sup>7</sup>: B29C 45/16, A61M 5/315
- (21) International Application Number: PCT/BE2003/000157
- (22) International Filing Date: 24 September 2003 (24.09.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
2002/0592 14 October 2002 (14.10.2002) BE  
2003/0103 14 February 2003 (14.02.2003) BE  
60/448,899 24 February 2003 (24.02.2003) US
- (71) Applicant (for all designated States except US): BOUTECH, naamloze vennootschap [BE/BE]; Ambachtenstraat 84, B-8870 Izegem (BE).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): BOUCHERIE, Bart, Gerard [BE/BE]; Ambachtenstraat 84, B-8870 Izegem (BE).
- (74) Agent: DONNE, E.; Bureau M.F.J. Bockstael nv., Arenbergstraat 13, B-2000 Antwerpen (BE).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES,

[Continued on next page]

(54) Title: METHOD AND DEVICE FOR MANUFACTURING PLUNGERS FOR MEDICAL SYRINGES, PLUNGERS OBTAINED THEREBY, AS WELL AS A SYRINGE FOR MEDICAL PURPOSES



(57) Abstract: Method for manufacturing plungers for medical syringes, whereby such a plunger (3) consists of at least two parts, namely a longitudinal plunger body (4) made of plastic and a piston body (5) provided at the front end of the plunger body (4) which consists of a plastic which is softer than the plastic of the plunger body (4), characterised in that such a plunger (3), or at least a part (36) thereof, is formed by first manufacturing the piston body (5) and then the plunger body (4), or at least a part (37) of this plunger body (4), by means of injection moulding, whereby the plunger body (4), or the above-mentioned part (37) thereof, is injected against the piston body (5).